

Clean Energy Resolution and Sustainability Updates

Town Board Workshop
January 22, 2024





Clean Energy Resolution 2017

The Town of Hillsborough, North Carolina shall establish a transition from fossil fuel-powered operations to 100% clean/renewable energy by December 31, 2050, or sooner and 80% clean, renewable energy by 2030, to build a more resilient community, promote an environmentally sustainable economy, and to protect our local community and the Earth for current and future generations.



Background

- 2017: Clean Energy Resolution
- 2018: Energy Baseline Report
- 2018: Clean Energy Resolution Project Report
- 2019: Rooftop Solar Photovoltaic Assessment
- 2019: Southeast Sustainability Directors Network (SSDN)
- 2020-2022: Orange County Climate Council (OCCC)
- 2021: Local Government Clean Energy Report
- 2021-2023: Hillsborough Comprehensive Sustainability Plan
- 2023: Hillsborough Strategic Plan for FY2024-26



HILLSBOROUGH
COMPREHENSIVE
SUSTAINABILITY PLAN



2017

2018

2019

2020

2021

2022

2023

2024



Partnerships

- Central Pines Regional Council (formerly TJCOG)
- Orange County Climate Council (OCCC)
- Environmental Defense Fund (EDF)- Cities Initiative
- Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO)
- North Carolina Department of Transportation (NCDOT)
- Southeast Sustainability Directors Network (SSDN)
- Upper Neuse River Basin Association (UNRBA)
- Triangle Water Supply Partnership (TWSP)





Past Progress: Policies and Advocacy

- Parks Master Plans sustainability recommendations (2017-2022)
- Grounds Maintenance best practices (2019)
- Managed natural landscapes ordinance (2019)
- Joint comments on Duke Energy-Integrated Resource Plan (2021)
- Transportation and connectivity priorities (2021)
- Joint comments on Duke Energy-Carbon Plan (2022)
- Telecommuting policy for employees (2022)
- Public, Level 2, Electric Vehicle Supply Equipment Suitability Analysis (2022)
- LEED Community-Orange County (2022)
- Town standard for streetlights (3000 Kelvin, Type 2, 50 Watt) (2023)
- Solarize the Triangle (2022/2023)
- “Leave the Leaves” video and campaign (2023)
- Vision Zero Policy (2023)



Past Progress: Projects

Community Services

- LED lighting transition of Mercury Vapor (MV) streetlights
- LED lighting transitions at facilities
- Programmable thermostats at facilities
- Tankless hot water heaters at facilities
- Energy Star equipment/appliances at facilities
- Stormwater green infrastructure (ex. riparian buffer restoration, bioswales, compost blankets)
- Grounds maintenance (ex. Pollinator/wildlife habitat, invasive species removal, Tree City, Bee City USA)

Utilities

- Wastewater Treatment Plant upgrade
- Implementation of control system at Water Treatment Plant
- Elizabeth Brady Pump Station Variable Frequency Drive (VFD) Improvements



Past Progress: Projects

Police

- 3-Electric patrol bicycles
- 2-hybrid police vehicles

All Departments

- Transition from desktop computers to more efficient laptops
- Reduce use of Styrofoam and single-use plastics at town events
- Recycled paper products
- Employee Engagement Committee
- ENGAGE Hillsborough Series



**ENGAGE
HILLSBOROUGH**



Upcoming:

- Future Land Use Map Update
- Unified Development Ordinance Rewrite
- Future train station (Net-Zero ready goal)
- Highway 86/Fleet renovation (Electric vehicle ready)
- Adron Thompson renovation (Solar ready)
- New stormwater management plan
- Charging and Fueling Infrastructure (CFI) Grant (Round 2)
- LED transitions of streetlights (High Pressure Sodium)
- Multimodal transportation projects
- Ridgewalk greenway





Future Needs and Opportunities

Budget Needs

- Energy tracking and management software (FY25)
- Facility management software and floor plans (FY25)
- Recycling at town parks (FY25)
- Updated solar analysis for facilities/parks
- Sustainability intern
- Grants administration help
- Matching funds for future grant applications
- Tree inventory/urban forestry plan
- Electric vehicle charging for fleet
- Solar farm through Green Source Advantage (GSA) program
- Solar and battery storage for facilities
- Solar canopy parking and picnic shelters
- Solar canopy electric vehicle charging
- Stormwater green infrastructure projects
- Tree Plantings/reforestation
- Climate Pollution Reduction Grant (CPRG)

Program/Policy Needs

- Rightsizing/transitioning fleet
- Electronic retention policy to reduce paper waste
- “Climate Corner” in employee and citizen newsletters
- Green Team (Engagement Committee)



Sustainability Funds – Recommended Programming

Recommended Use	FY22	FY23	FY24	FY25	FY26	FY27
<ul style="list-style-type: none"> • Train Station Solar Panels 	\$300,000	\$300,000	\$150,000			
<ul style="list-style-type: none"> • Energy Tracking Software • Recycling at Parks • LED Streetlight Conversion 			\$150,000			
<ul style="list-style-type: none"> • Updated Solar Analysis for Facilities • Sustainability Intern • Grant Administration Assistance 				\$200,000		
<ul style="list-style-type: none"> • GSA Program • Tree Inventory/Urban Forestry Plans 					\$400,000	
<ul style="list-style-type: none"> • Solar and Weatherization Projects • Tree Planting/Reforestation 						\$300,000

- How to fund sustainability initiatives for Utilities projects? Major need without current dedicated funding.



Questions and Discussion

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